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REMARKS

I. Status of the Application.

Claims 1-6 and 8-19 of the Application were pending as of the date of the Office Action.

In the Office Action, the Examiner:

- (a) Rejected claims 14-16 under 35 U.S.C. §102(b) as being allegedly anticipated by U.S. Patent No. 3,959,431 to Nissel ("Nissel");
- (b) Rejected claims 1-6, 8-10 and 14-16 under 35 U.S.C. §103(a) as being allegedly obvious over U.S. Patent No. 5,798,151 to Andersen ("Andersen") in view of U.S. Patent No. 3,821,868 to Edwards ("Edwards");
- (c) Rejected claims 11-13 under 35 U.S.C. §103(a) as being allegedly obvious over Andersen in view of Edwards in further view of U.S. Patent No. 3,832,250 to Pearson ("Pearson") and U.S. Patent No. 3,527,447 to Kinkade ("Kinkade");
- (d) Rejected claims 17-19 under 35 U.S.C. §103(a) as being allegedly obvious over Nissel in view of Andersen in further view of Edwards; and
- (e) Rejected claims 17-19 under 35 U.S.C. §103(a) as being allegedly obvious over Andersen in view of Edwards.

In this Response, Applicant amends claims 1 and 14, adds claims 20-22, and cancels claim 6.

Applicant respectfully submits that the foregoing amendments and following remarks incorporated herein overcome the Examiner's rejections of the Application.

II. Applicant's Amendments Do Not Constitute New Matter.

Applicant respectfully submits that the amendments to claims 1 and 14 and the addition of claims 20-22 do not add new matter to the Application. The amendments to the claims are

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supported by the figures as originally filed and generally by the original specification. For example, and among other places, the amendments are supported in paragraphs [0020-0021, 0028, 0031, 0043-0046, 0059-0072] and original Figure 2 of the specification. Applicant respectfully submits that all the amendments are supported by the specification, as originally filed, and do not constitute new matter. Accordingly, Applicant respectfully requests entry of these amendments.

III. The Rejection Of Claims 14-16 Under 35 U.S.C. §102(b) As Being Anticipated By Nissel Should Be Withdrawn.

Applicant respectfully submits that the rejections of claims 14-16 under 35 U.S.C. §102(b) should be withdrawn because Nissel does not disclose all the limitations of claims 14-16. A rejection under 102(b) can be overcome by showing that the prior art does not disclose all the limitations of the claims. MPEP §706.02(b). Nissel discloses an apparatus for making a multiple layer laminated sheet that comprises an extruder 21 with an input hopper 23 and a discharge 24 serially connected to an adaptor 22 and a sheet-forming die 19. (Col. 3, ll. 45-68, Col. 4, ll. 1-9). Nissel has a lateral feed tube 37 connected to the adaptor 22 in order to inject a second substance into the adaptor to create a multiple-layered laminate. (Col. 3, ll. 19-68; Col. 4, ll. 1-23). In contrast, the claimed invention of claim 14 comprises an "apparatus for producing a gypsum wallboard core, the apparatus comprising . . . at least one secondary inlet having a base connected at one of the lateral edges of the extrusion die, a top and an elongated tube between the top and the base, wherein the base, the top and the elongated tube form a conduit into the extrusion die to allow for the introduction of at least one gypsum slurry additive, which is an

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emulsion or fluid, directly to the extrusion die, so that the gypsum slurry additive can be added to a gypsum slurry passing through the extrusion die."

Applicant respectfully submits that the sheet forming die of Nissel does not have such a secondary inlet with "a base connected at one of the lateral edges of the extrusion die" and does not form a conduit that allows for a gypsum slurry additive, which is an emulsion or fluid, to be added to a gypsum slurry passing through the extrusion die. Applicant notes that on January 14, 2006, the undersigned and the Examiner discussed a similar amendment that also specified that the secondary inlet is "connected at one of the lateral edges of the extrusion die" prior to the issuance of the Office Action and the Examiner indicated that such an amendment would overcome the rejection of the claims based upon Nissel. Accordingly, Applicant respectfully requests that the rejection of claims 14-16 under 35 U.S.C. §102(b) as being anticipated by Nissel be withdrawn because Nissel does not disclose all the limitations of amended claim 14. Moreover, Applicant respectfully submits that the rejections of claims 15-16 should be withdrawn because claims 15-16 depend from and incorporate all the limitations of claim 14.

IV. The Rejections Of Claims 1-6 and 8-19 Under 35 U.S.C. §103(a) Should Be Withdrawn.

Applicant respectfully submits that the rejection of claims 1-6 and 8-19 under 35 U.S.C. §103(a) should also be withdrawn because none of the prior art references teach or suggest all the limitations of independent claims 1 and 14. Three criteria must be met to establish a *prima facie* case of obviousness: (i) there must be some suggestion or motivation to combine the teachings of two or more prior art references; (ii) there must be a reasonable expectation of success; and (iii) "all of the claim limitations must be taught or suggested by the prior art."

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MPEP §§ 2143 and 2143.03 (citing *In re Royka*, 490 F.2d 981 (C.C.P.A. 1974)). "If an independent claim is not obvious under 35 U.S.C. §103, then any claim depending therefrom is not obvious." MPEP 2143.03 (citing *In re Fine*, 837 F.2d 1382, 1385 (C.C.P.A. 1970)).

A. The Rejection Of Claims 1-6, 8-10 and 14-16 Under 35 U.S.C. §103(a) As Being Obvious Over Andersen In View Of Edwards Should Be Withdrawn.

Applicant respectfully submits that the rejection of claims 1-6, 8-10 and 14-16 under 35 U.S.C. §103(a) as being obvious over Andersen in view of Edwards should be withdrawn because neither Andersen nor Edwards disclose, teach or suggest all the limitations of independent claim 1. Andersen discloses and teaches methods and apparatus for continuously extruding a hydraulically settable matrix (including gypsum) that contains continuous filaments and articles formed by those methods and apparatus. (Col. 53, ll. 30-47). Andersen states that "the primary novel feature" of the invention involves the "[i]ntroduction of filaments during the extrusion process [by] . . . placing the filaments in the mixture, which encases and draws the filaments in the hydraulically settable mixture along in the extrusion direction." (Emphasis added; Col. 9, ll. 13-20). The apparatus disclosed by Andersen "comprises a means for continuously placing filaments within an extruding hydraulically settable mixture which are in direct communication with a filament placement chamber, which is an interior chamber of an extruder." (Col. 10, ll. 20-23).

The Examiner cites Edwards for the offering that wallboard, drywall, decorating paneling or the like is well known to be produced in panels that are 8 feet high, 4 feet wide, and three-eighths of an inch thick. As discussed in Applicant's previous responses, Edwards does not discuss an extrusion die for producing wallboard.

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Neither Andersen nor Edwards disclose, teach or suggest an extrusion die having four adjustable plates (top, bottom and two side plates) that define "a substantially rectangular die exit" and that "can be adjusted to a variety of widths and thicknesses so that the die exit is dimensioned to have a ratio of width to thickness of about 48:1 to about 216:1", as claimed in amended claim 1. Neither Andersen nor Edwards discuss in any fashion an extrusion die having four adjustable plates defining a substantially rectangular die exit dimensioned to have a ratio of width to thickness of about 48:1 to about 216:1. Accordingly, Applicant respectfully submits that claim 1 cannot be obvious over Andersen in view of Edwards because neither of the references alone or in combination teach or suggest all of the claim limitations of amended claim 1.

Further, neither Andersen nor Edwards disclose, teach or suggest the "at least one secondary inlet having a base connected at one of the lateral edges of the extrusion die, a top and an elongated tube between the top and the base, wherein the base, the top and the elongated tube form a conduit into the extrusion die to allow for the introduction of at least one gypsum slurry additive, which is an emulsion or fluid, directly to the extrusion die, so that the gypsum slurry additive can be added to a gypsum slurry passing through the extrusion die", claim limitations of amended claims 1 and 14. Edwards does not even discuss an extrusion die for the production of wallboard. Andersen describes, teaches and suggests only filament entries 58 that allow for the introduction of filaments into a hydraulically settable mixture being extruded from the die. The filament entries of Andersen do not have "a base connected at one of the lateral edges of the extrusion die, a top and an elongated tube between the top and the base." Moreover, the filament

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entries disclosed, taught and suggested by Andersen do not have a base, a top and an elongated tube therebetween that form a conduit into the extrusion die.

Because the combination of the cited references fail to disclose, teach or suggest the above-note limitations of amended claims 1 and 14, Applicant respectfully submits that the claims are not obvious in view of Andersen or Edwards. Accordingly, Applicant respectfully requests that the rejection of claims 1 and 14 under 35 U.S.C. §103(a) be withdrawn. Moreover, Applicant respectfully requests that the rejections of claims 2-5, 8-10, and 15-16 under 35 U.S.C. §103(a) be withdrawn because each of these claims depend from and incorporate all the limitations of either amended claim 1 or claim 14. Applicant also notes that the rejection of claim 6 under 35 U.S.C. §103(a) is now moot because the claim has been canceled.

B. The Rejection of Claims 11-13 Under 35 U.S.C. §103(a) As Being Obvious Over Andersen in View of Edwards in Further View of Pearson in Further View of Kinkade Should Also Be Withdrawn.

Applicant respectfully submits that the rejections of claims 11-13 under 35 U.S.C. §103(a) are now moot and should be withdrawn because each of these claims depend from amended claim 1, which as discussed above, is not obvious over Andersen in view of Edwards. "If an independent claim is not obvious under 35 U.S.C. §103, then any claim depending therefrom is not obvious." MPEP 2143.03 (citing *In re Fine*, 837 F.2d 1382, 1385 (C.C.P.A. 1970)).

C. The Rejection of Claims 17-19 Under 35 U.S.C. §103(a) As Being Obvious Over Either Nissel in View of Andersen and in Further View of Edwards or Over Andersen in View of Edwards Should Be Withdrawn.

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Applicant respectfully submits that the rejections of claims 17-19 under 35 U.S.C. §103(a) are now moot and should be withdrawn because each of these claims depend from amended claim 14, which as discussed above, is not anticipated by Nissel or obvious over Andersen in view of Edwards. "If an independent claim is not obvious under 35 U.S.C. §103, then any claim depending therefrom is not obvious." MPEP 2143.03 (citing *In re Fine*, 837 F.2d 1382, 1385 (C.C.P.A. 1970)).

V. New Claims 20-22 Are in Allowable Form.

Applicant respectfully submit that claims 20-22 are in allowable form and are neither anticipated by nor obvious over any of the cited art, because none of the references disclose, teach or suggest all of the limitations of claims 20-22. Applicant respectfully submits that no additional fees are needed for these claims because these claims do not cause the Application to exceed 3 independent claims or 20 total claims for which the Applicant has already paid. Accordingly, Applicant respectfully requests that these claims proceed to allowance.

VI. Request for Continued Examination.

Applicant also requests continued examination by submitting a Request for Continued Examination transmittal form, this response and requesting that the \$790.00 filing fee be charged to the identified credit card.

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CONCLUSION

For all of the foregoing reasons, it is respectfully submitted that claims 1-5 and 8-22 are allowable claims. Allowance of this Application is therefore respectfully requested. In the event Applicant has inadvertently overlooked the need for payment of any fees, Applicant conditionally petitions therefore, and authorize any deficiency to be charged to deposit account 09-0007. When doing so, please reference the above-listed docket number. If there are any other further objections, the Examiner is invited to contact the undersigned to discuss the application.

Respectfully submitted,

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